



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/831,899	05/24/2001	Gerard Reynaud	208822US6XPC	3169
22850	7590	12/29/2004		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER EREZO, DARWIN P	
			ART UNIT	PAPER NUMBER
			3731	

DATE MAILED: 12/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/831,899	Applicant(s) REYNAUD, GERARD	
	Examiner Darwin P. Erez	Art Unit 3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2004.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-24 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 10-24 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 10, 14, 16-20, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,718,415 to Bolnberger et al. in view of US 3,633,705 to Teder.

(claim 17) Bolnberger teaches a mask having a flexible cap **1**; an exhalation port **4** pierced through the cap; a housing on an inner surface of the flexible cap (see attached Fig. 1); first microphone capsule **13** positioned above the exhalation port; a tubular mouth-piece **9, 14** extending from a first distal end disposed adjacent the flexible cap to a second distal end projecting away from the flexible cap, the first microphone capsule mounted at the first distal end of the tubular mouthpiece (the part of **9** closes to the mouth-piece), the second distal end of the mouthpiece disposed away from the microphone capsule and defining aperture turned away from the flexible cap (see Fig. 3); an arm extending from the housing and supporting the tubular mouth piece at the first distal end adjacent the first microphone capsule (see attached Fig. 1). Bolnberger is silent with regards to the mouthpiece being a conical tubular mouthpiece.

Teder teaches that it is known in the art for a microphone **24** to have a tubular mouthpiece **28** for substantially reducing the level of background noise picked up by the microphone.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the tubular mouthpiece of Bolnberger to a conical tubular mouthpiece, as taught by Teder, because having a conical tubular mouthpiece reduces the level of background noise picked up without decreasing the response of the microphone (col. 2, lines 42-73; Teder).

(claim 10) Bolnberger is silent with regards to an elliptical mouthpiece. However, at the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to use an elliptical aperture because Applicant has not disclosed that an elliptical aperture provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with either the aperture of Bolnberger or the claimed elliptical aperture because both type of aperture perform the same function. Therefore, it would have been obvious matter of design choice to modify Bolnberger to obtain the invention as specified in claim 10.

(claim 14) Bolnberger teaches a cable **19** connected to the microphone capsule;

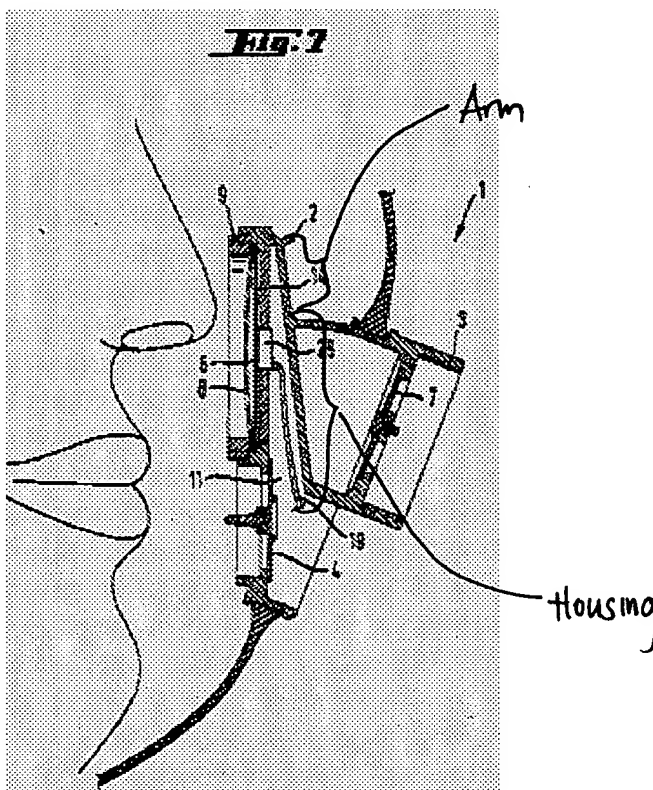
(claim 16) Bolnberger discloses the claimed invention except for the mask further comprising a second microphone capsule. It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a second microphone capsule, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

(claim 18) Bolnberger teaches the mouthpiece **9,14** (as seen in Fig. 8) is larger than the opening facing the microphone;

(claims 19 and 20) wherein the microphone capsule has an acoustic chamber having a plurality of holes **23** with a high pass filtering capability of about 50-4000 Hz;

(claim 23) a body **3** mounted in the housing, and wherein the arm extends from the body to support the mouthpiece; and

(claim 24) wherein the aperture is turned towards a center of a location at which the user's mouth is adapted to be positioned (Fig. 1)



3. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,718,415 to Bolnberger et al. in view of US 3,633,705 to Teder and in further view of US 5,503,141 to Bolnberger et al.

Bolnberger/Teder is silent with regards to the mouth-piece having a metal lattice acoustic screen positioned in the aperture. Bolnberger discloses a mask having a cloth acoustic screen **32** positioned in a mouth-piece aperture. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use an acoustic screen in the device of Bolnberger because it protects the microphone capsule from moisture, dust and the like (Bolnberger; col. 5, lines 3-5). Furthermore, it would have been an obvious matter of design choice to a person of ordinary skill in the art to use a metal lattice screen because Applicant has not disclosed how the metal lattice screen provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with either the cloth screen of Bolnberger or the claimed metal lattice screen because both screens perform the same function.

4. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,718,415 to Bolnberger et al. in view of US 3,633,705 to Teder and in further view of US 4,961,420 to Cappa et al.

Bolnberger/Teder teaches all the limitations of the claims except for a mask further comprising a baffle fixedly joined to the flexible cap and positioned between the microphone capsule and the exhalation port. Cappa teaches a baffle **40** attached to a

cap and positioned above an exhalation port. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add the baffle of Cappa in the device of Bolnberger in order to prevent expired air from penetrating the upper portions of the mask (col. 7, lines 36-43).

5. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,718,415 to Bolnberger et al. in view of US 3,633,705 to Teder and in further view of 3,910,269 to Ansite et al.

Bolnberger/Teder teaches all the limitations of the claim except for a mask further comprising plural catches joined to the flexible cap and mounted substantially perpendicular to an external face of the flexible cap. Ansite teaches a mask having plural catches **53** joined to a flexible cap and mounted substantially perpendicular to an external face of the flexible cap. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add the plural catches of Ansite to the mask of Bolnberger because it allows the user to use straps to further secure the mask on the user's head.

6. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,718,415 to Bolnberger et al. in view of US 3,633,705 to Teder and in further view of US 3,314,424 to Berman.

Bolnberger/Teder is silent with regards to the device having an adjustable mouthpiece. Berman teaches a mask having a microphone mounted on an adjustable

mouth-piece (via element **44**) that is capable of varying from 10-18 mm. Therefore, it would have been obvious to modify the device of Bolnberger to include the adjustable means of Berman because it allows the user to move the mouth-piece directly in front of the user's mouth.

Response to Arguments

7. Applicant's arguments filed 9/13/04 have been fully considered but they are not persuasive.

As noted in the rejection above, Bolnberger teaches a housing and an arm extending from the housing to support the tubular mouthpiece. The attached Fig. 1 better illustrates what the examiner considers as the arm. It should be noted that the limitation "arm" is not interpreted as a completely separate structure, i.e., an arm can be anything that extends from a surface.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Therefore, the motivation to combine the references is proper since Teder

teaches the advantages of having a tubular mouthpiece, which is to decrease background noise. Though

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Darwin P. Erezó whose telephone number is (571) 272-4695. The examiner can normally be reached on M-F (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan T. Nguyen can be reached on (571) 272-4963. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3731

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

de



GLENN K. DAWSON
PRIMARY EXAMINER